

***PSEUDOTSUGA MENZIESII* - *THUJA PLICATA* /  
*RHODODENDRON MACROPHYLLUM***

Douglas-fir - western redcedar / Pacific rhododendron  
Abbreviated Name: PSME-THPL/RHMA

Sample size = 14 plots

**DISTRIBUTION:** Occurs in the northern Puget Trough, including Jefferson, Clallam, Island, and possibly Skagit (Cypress Island) counties. Closely similar types that we consider part of the same association occur in the eastern Olympic Mountains and in the Oregon Cascades.

**GLOBAL/STATE STATUS:** G4S4. Within the Puget Trough, the vast majority of stands have been harvested in the past and there are very few good quality occurrences. In the adjacent Olympic Mountains, the more montane version of this association is relatively common and in better condition.

**ID TIPS:** Pacific rhododendron and salal co-dominate the under-story. Rhododendron always provides >5% cover. Evergreen huckleberry provides <5% and sword fern <3% cover.

**ENVIRONMENT:** These sites are moderately dry and appear to be very nutrient-poor. Parent materials include glacial till, glacial outwash, residuum, and colluvium. Soil texture is usually gravelly or very gravelly sandy loam. This association is most common in areas with relatively low annual precipitation.

**Precipitation:** 23-64 inches (mean 37)

**Elevation:** 100-1000 feet

**Aspect/slope:** various/ 0-47% (mean 14%)

**Slope position:** plain, mid, ridgetop, upper, short

**Soil series:** Catla, Hoypus, Triton, Olete, Louella, Beausite

**DISTURBANCE/SUCCESSION:** Fire is the primary natural disturbance. Old-growth stands show evidence of past low- to moderate-severity fire (underburns). Western hemlock and/or redcedar increase over time in absence of disturbance, Douglas-fir decreases. Young stands may have little hemlock or redcedar. Pacific madrone can become more important after fire.

**VEGETATION:** Douglas-fir tends to dominate the uppermost canopy layer. Western redcedar or western hemlock (the former more commonly) usually either co-dominate the canopy with Douglas-fir or dominate tree regeneration. Pacific rhododendron

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**Vegetation Composition Table (selected species):**

Con = constancy, the percent of plots within which each species was found;  
Cov = cover, the mean crown cover of the species in plots where it was found.

Trees	Kartesz 2003 Name	Con	Cov
Douglas-fir	Pseudotsuga menziesii var. menziesii	100	70
western redcedar	Thuja plicata	93	46
western hemlock	Tsuga heterophylla	71	23
Pacific madrone	Arbutus menziesii	29	8
<b>Shrubs, Subshrubs</b>			
Pacific rhododendron	Rhododendron macrophyllum	100	24
salal	Gaultheria shallon	100	22
dwarf Oregongrape	Mahonia nervosa	86	6
oceanspray	Holodiscus discolor	57	5
evergreen huckleberry	Vaccinium ovatum	50	2
red huckleberry	Vaccinium parvifolium	50	1
baldhip rose	Rosa gymnocarpa	43	1
trailing blackberry	Rubus ursinus var. macropetalus	29	1
<b>Forbs and Ferns</b>			
bracken fern	Pteridium aquilinum var. pubescens	21	3
sword fern	Polystichum munitum	21	+

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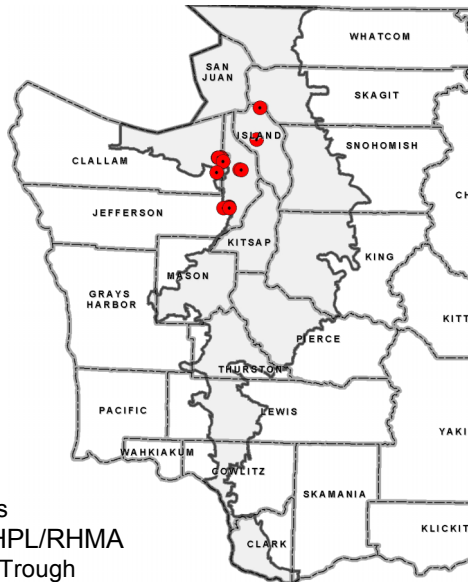


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and salal typically co-dominate the shrub layer. Dwarf Oregongrape is usually present and occasionally co-dominant. Oceanspray is often present and sometimes prominent. Evergreen huckleberry and red huckleberry are present in small amounts in about half the plots. The herb layer is low in diversity and cover.

**CLASSIFICATION NOTES:** Described originally by Chappell (1997) as PSME-TSHE/RHMA-GASH. NatureServe (2004) considers it part of PSME-TSHE/RHMA-VAOV-GASH and TSHE/RHMA. In the Olympic National Forest and northwestern Oregon Cascades, the TSHE/RHMA-GASH association is very similar (Henderson et al. 1989, McCain and Diaz 2002b).

**MANAGEMENT NOTES:** Stands that have not been previously harvested or mature and old-growth stands, even if they have been disturbed by thinning, should be considered for conservation status. These sites are low productivity for tree growth.



Plot locations  
of PSME-TSHE/RHMA  
in the Puget Trough